

MTBN1

MTAEPEVRTLREVVLDQLGTAESRAYKMWLPPLTNPVPLNELIARDRRQPLRFALGIMDE
PRRHLQDVGVGDVGAGGNIGIGGAPQTGKSTLLQTMVMSAAATHSPRNQFYCIDLGGG
GLIYLENLPHVGGVANRSEPDVKNRVVAEMQAVMRQRETTFKEHRVGSIGMYRQLRDDPS
QPVASDPYGDVFLLIDGWPGFVGEFPDLEGQVQDLAAQGLAFGVHVIISTPRWTELKSRV
RDYLGTKEFRLGDVNETQIDRITREIPANRPGRAVSMEKHLMIGVPRFDGVHSADNLV
EAITAGVTQIASQHTEQAPPVRVLPERIHLHELDPNPPGPESDYRTRWEIPIGLRETDLT
PAHCHMHTNPHLLIFGAAKSGKTTIAHAIARAICARNSPQQRFMLADYRSGLLDAPDT
HLLGAGAINRNSASLDEAVQALAVNLKKRLPPTDLTTAQLRSRSWWSGFDVLLVDDWHM
IVGAAGGMPPMAPLPLPAAADIGLHIIVTCQMSQAYKATMDKFVGAAGSGAPTMFLS
GEKQEFPSSFKVRRPPGQAFLVSPDGKEVIQAPYIEPPEEVFAAPPSAG*

MTBN2

MEKMSHDPIAADIGTQVSDNALHGVTAGSTALTSGTAGVHVSQAGVFAE*
LLASNASAQDQLHRAVEAVQDVARTYSQIDDGAAGVFAE*

MTBN3

MLWHAMPPELNTARLMAGAGPAPMLAAAAGWQTLSAALDAQAVELTARLNSLGEAWTG
SDKALAAATPMVVWLQTA
STTNPIFGMPSPGSSTPGQLPPAATQTLGQLGEMSGPMQQLTQPLQQVTSLSQVGGTG
GGNPADEEEAQMGLLGTPLSNHPLAGGSGPSAGAGLLRAESLPGAGGSLTRTPLMSQLI
EKPVAPSVMAAAAGSSATGGAAPVGAGAMQGAQSGGSTRPGLVAPAPLAQEREEDDED
DWDEEDDW*

MTBN4

MAEMKTDAATLAQEAGNFERISGDLKTQIDQVESTAGSLQGQWRGAAGTAAQAAVVRFQE
AANKQKQELDEISTNIRQAGVQYSRADEEQQQALSSQMGF*

MTBN5

MAADYDKLFRPHEGMEAPDDMAAQPFDFPSASFPPAPASANLPKPNQTPPPSTSDDL
SERFVSAPP
IAGPEPAPPKPPTPPMPIAGPAPTPTESQLAPP
HQPRRTAPAPPWAKMPIGEPPPAPS
GKVATGPSIQARLRAEEASGAQLAP
NSGRRAERRVHPDLAAQHAAQ
KVKPQKP
ELSHYND
FFDPLTRGV
PNVAVKDL
ERAGRR*

FIG. 1A

MTBN6

LSAPAVAAGATAARPATRVTILTGRRTMDLVLPAAVPMETYIDDTVAVLSEVLE
DTPADVLGGFDFTAQGVWAFAWRPGSPPLKLDQSLDDAGVVDGSLTLVSVSRT
EDVIDAIAVLDESPEFDRTALNRFVGAAIPLLTA
PVIGMAMRAWWETGRSLWWPLAIGIL
GIAVLVGSFVANRFYQSGLAECLLVTTYLLIATAAALAVPLPRGVNSLGAPQVAG
AATAVLFLTLMTRGGPRKRHELASF
AVITAIAVIAAAAAFGYGYQDWVPAGGIAGLFIVTNAA
KLTVAVARIALPPIPVPGETVDNEELLDPVATPEATSEETPTWQAI
IASVPASAVRLTER
SKLAKQLLIGYVTSGTLILAAGAI
AVVVRGHFFVHSLVVAGLITTVCGFRSRLYAERWCA
WALLAATVAIPTGLTAKLI
IWPHYAWLLL
SVYLTVALVALVVVGSMAHVRRVSPVVKRT
LELIDGAMIAAI
IPMLL
WITGVYDTVRNIRF*

MTBN7

MAEPLAVDPTGLSAAAALKLAGLVFPQPPAPIAVSGTDSVVAAINETMPSIESLVDGLPG
VKAALTRTASNMNAAADVYAKTDQSLGTSLSQYAFGSSGEGLAGVASVGQPSQATQLLS
TPVSQVTQLGETAAELAPRVVATVPQLVQLAPHAVQMSQNAPIAQTIQSTAQQAAQSA
QGGSGPMPAQLASAEKPATEQAEPVHEVTNDDQGDQGDVQPAEVVAAARDEGAGASPGQQ
PGGGVPAQAMDTGAGARPAASPLAAPVDPSTPAPSTTTL*

MTBN8

MSITRPTGSYARQMLDPGGWVEADEDTFYDRAQEYSQVLQRVTDVLDTCRQQKGHVFEGG
LWSGGAANAANGALGANINQLMTLQDYLATVITWHRHIAGLIEQAKSDIGNVDGAQREI
DILENDPSLDADERHTAINSLVTATHGANVSLVAETAERVLESKNWKPPKNALEDLLQQK
SPPPDVPTLVVPSPGTGPGTPIPGTPITPGTPITPGTPITPGAPVTPITPTPGTPVTPV
PGKPVTPVTPVKPGTPGEPTPITPVTPVPPVAPATPATPATPATPATPATPATPATPAT
PQPVTPATPGPSGPATPGTPGGEPAHVVKPAALAEQPGVPGQHAGGGTQSGPAHADESAA
SVTPAAASGVPGARAAAAAPSGTAVGAGARSSVGTAAASGAGSHAATGRAPVATSDKAAA
PSTRAASARTAPPARPPSTDHIDKPDRESADDGTPVSMIPVSAARAARDAAATAAASARQ
RGRGDALRLARRIAAALNASDNNAGDYGFFWI TAVTTDGSIVVANSYGLAYIPDGME LPN
KVYLASADHAI PVDEIARCATYPVLA VQAWAAFHDMLRAVIGTAEQLASSDPGVAKIVL
EPDDI PESGKMTGRSRLEVVDPSAAAQLADTTDQRLLLPPAPV DVNPPGDERHMLWFE
LMKPMTSTATGREAAHLRAFRAYAAHSQEIALHQAH TADAAVQRVAVADWLYWQYVTGL
LDRALAAAC*

FIG. 1B

mtbn1

1 atgactgctg aaccggaagt acggacgctg cgcgagggtg tgcgtggacca
51 gctcggcact gctgaatcgc gtgcgtacaa gatgtggctg cccgcgttgc
101 ccaatccggc cccgctcaac gagctcatcg cccgtgatcg ggcacaaccc
151 ctgcgatttg ccctggggat catggatgaa ccgcgcgcgc atctacagga
201 tgtgtggggc gtagacgttt ccggggccgg cgcaacatc ggtattgggg
251 gcgcacccca aaccgggaag tcgacgctac tgcaagacat ggtgatgtcg
301 gccgcgcaca cacactcacc gcgcaacgtt cagttctatt gcatcgaccc
351 aggtggcggc gggctgatct atctcgaaaa cttccacac gtcgggtggg
401 tagccaatcg gtccgagccc gacaagggtca accgggttgt cgcaagatg
451 caagccgtca tgccggcaacg ggaaaccacc ttcaaggaac accgagtggg
501 ctcgatcgcc atgtaccggc agctgcgtga cgatccaatg caacccgttg
551 cgtccgatcc atacggcgac gtcttctga tcatacgacgg atggcccggt
601 tttgtcggcg agttccccga ctttggggg caggttcaag atctggccgc
651 ccaggggctg gcgttcggcg tccacgtcat catctccacg ccacgctgga
701 cagagctgaa gtcgcgtgtt cgcgactacc tcggcaccaa gatcgagttc
751 cgcttggtg acgtcaatga aaccaggatc gaccggatta cccgcgagat
801 cccggcgaat cgtccgggtc gggcagtgtc gatggaaaag caccatctga
851 tgatcggcgt gcccagggttc gacggcgtgc acagcgccga taacctggg
901 gaggcgatca ccgcgggggt gacgcagatc gcttcccacg acaccgaaca
951 ggcacccctcg gtgcgggtcc tgccggagcg tatccacctg cacgaactcg
1001 acccgaaaccc gccgggacca gagtccgact accgcactcg ctggagatt
1051 ccgatcggtc tgccgcgagac ggacctgacg ccggctcaact gccacatgca
1101 cacgaaccccg cacctactga tcttcgggtc ggccaaatcg ggcaagacga
1151 ccattgcccc cgcgatcgcc cgccgcattt gtccccgaaa cagtccccag
1201 caggtgcggc tcatgctcgc ggactaccgc tcgggcctgc tggacgcgg
1251 gccggacacc catctgctgg gcccggcgcc gatcaaccgc aacagcgctg
1301 cgcttagacga gcccgttcaa gcactggcg tcaacctgaa gaagcggttg
1351 ccgcgcaccg acctgacgac ggcgcagota cgctcgcggt cgtgggtggag
1401 cgatattgac gtcgtgtttc tggcgtacga ttggcacatg atcgtgggtg
1451 ccgcgggggg gatgccggcg atggcaccgc tggccccgtt attgcggcg
1501 gccgcagata tcgggttgca catcattgtc acctgtcaga tgagccaggc
1551 ttacaaggca accatggaca agttcgtcgg cgccgcattc gggtcgccgc
1601 ctccgacaat gttcctttcg ggcgagaagc aggaattccc atccagttag
1651 ttcaagggtca agcggcgccc ccctggccag gcatttctcg tctcgccaga
1701 cggcaaagag gtcatccagg cccctacat cgagcctcca gaagaagtgt
1751 tcgcagcacc cccaaacgcggc gttaa

mtbn2

1 atggaaaaaaa tgtcacatga tccgatcgct gccgacattt gcaacgcaagt
51 gagcgacaac gctctgcacg gctgtacggc cggctcgacg ggcgtacgt
101 cggtaaccgg gctggttccc gggggggccg atgagggttc cgcggcaagcg
151 gcgcacggcgt tcacatcgga gggcatccaa ttgctggatt ccaatgcac
201 ggcggcaagac cagctccacc gtgcgggcga agcggtccag gacgtcgccc
251 gcacctattt gcaaatcgac gacggcgccg ccggcggtt cggcgaaatag

FIG. 2A

mtbn3

1 atgctgtggc acgcaatgcc accggagcta aataccgcac ggctgatggc
51 cggcgccgggt ccggctccaa tgcttgcggc ggccgcggga tggcagacgc
101 ttcggcggc tctggacgct caggccgtcg agttgaccgc ggcctgaac
151 tctctgggag aagcctggac tggaggtggc agcgacaagg cgcttgcggc
201 tgcaacgccc atggtggtct ggctacaaac cgctcaaca caggccaaga
251 cccgtgcgt gcaggcgacg ggcgaagccg cgctacac ccaggccatg
301 gccacgacgc cgtcgctgcc ggagatcgcc gccaaccaca tcacccaggc
351 cgtccttacg gccaccaact tcttcggtat caacacgatc ccgatcgct
401 tgaccgagat ggattatttc atccgtatgt ggaaccaggc agccctggca
451 atggaggtct accaggccga gaccgcggg aacacgctt tcgagaagct
501 cgagccgatg gcgtcgatcc ttgatccccg cgctgagccag agcacgacga
551 acccgatctt cggaaatgccc tccccctggca gctcaacacc gttggccag
601 ttgcccggc cggctaccca gaccctcgcc caactgggtg agatgagcgg
651 cccgatgcag cagctgaccc agccgctgca gcaggtgacg tcgttgttca
701 gccaggtggg cggcaccggc ggcggcaacc cagccgacga ggaagccgcf
751 cagatgggccc tgctcgac cagtccgctg tcgaaccatc cgctggctgg
801 tgatcaggc cccagcgcgg ggcggggcct gctgcgcgcg gagtcgtac
851 ctggcgcagg tgggtcggtt acccgacgc cgctgatgtc tcagctgatc
901 gaaaagccgg ttgccccctc ggtgatgccc gggctgctg ccggatcgatc
951 ggcgacgggt ggcgcccgtc cggtgggtgc gggagcgatg ggcagggtg
1001 cgcaatccgg cgctccacc aggcgggtc tggtcgcgcc ggacccgctc
1051 ggcgaggagc gtgaagaaga cgacgaggac gactgggacg aagaggacga
1101 ctggta

mtbn4

1 atggcagaga tgaagaccga tgccgctacc ctcgcgcagg aggcaggtaa
51 tttcgagccg atctccggcg acctgaaaac ccagatcgac caggtggagt
101 cgacggcagg ttctggcag ggcctggc gcccgcggc ggggacggcc
151 gcccaggccg cgggtggtgcg ctccaaagaa gcagccaata agcagaagca
201 ggaactcgac gagatctcga cgaatattcg tcaggccggc gtccaaact
251 cgagggccga cgaggagcag cagcaggcgc tgtcctcgca aatgggcttc
301 tga

mtbn5

1 atggcggccg actacgacaa gctcttccgg ccgcacgaag gtatgaaagc
51 tccggacgt atggcagcgc agccgttctt cgacccagt gcttcgtttc
101 cggccggcgcc cgcacccggca aacctaccga agcccaacgg ccagactccg
151 ccccccgt cgcacgacct gtcggagcgg ttcgtgtcgg ccccgccggcc
201 gcccacccca ccccccaccc cgcctccggc aactccgtg ccgatcgccg
251 caggagagcc gcctcgccg gaaccggccg catctaaacc acccacaccc
301 cccatgccc tcgcccggacc cgaaccggcc ccacccaaac caccacaccc
351 ccccatgccc atcgccggac cgcacccggc ccacccaaa ccacccacac
401 ctccgatgcc catcgccggc cctgcaccca ccccaaccga atcccaaggat

FIG. 2B

451 gcgcccccca gaccaccgac accacaaaacg ccaaccggag cgccgcagca
 501 accggaatca ccggcgcccc acgtaccctc gcacgggcca catcaacccc
 551 ggcgcaccgc accagcaccg ccctgggcaa agatgccaat cgcgaaaccc
 601 ccgccccgtc cgtccagacc gtctgcgtcc ccggccgaac caccgaccgg
 651 gcctgcccccc caacactccc gacgtgcgcg ccgggggtcac cgctatcgca
 701 cagacaccga acgaaacgtc gggaaaggtag caactggtcc atccatccag
 751 ggcggctgc gggcagagga agcatccggc ggcagctcg ccccccggAAC
 801 ggagccctcg ccagcgccgt tgggccaacc gagatcgtat ctggctccgc
 851 ccacccgccc cgccggacaca gaacctcccc ccagccctc gccgcagcgc
 901 aactccggtc ggcgtgccga ggcacgcgtc caccggatt tagccgcccc
 951 acatgcccgcg ggcacaccgtt attcaattac ggccgcaacc actggcggtc
 1001 gtcgcccggaa gcgtgcagcg ccggatctcg acgcgacaca gaaatcctta
 1051 aggccggcgcc ccaagggggcc gaaggtgaag aaggtgaagc cccagaaacc
 1101 gaaggccacg aagccgcccc aagtgggtgc gcagcgcggc tggcgacatt
 1151 ggtgtcatgc gttgacgcga atcaacctgg gcctgtcacc cgacgagaag
 1201 tacgagctgg acctgcacgc tcgagtcggc cgaatcccc gcgggtcgta
 1251 tcagatcgcc gtcgtcggtc tcaaagggtgg ggctggcaaa accacgctga
 1301 cagcagcggtt ggggtcgacg ttggctcagg tgccggccga ccggatcctg
 1351 gctctagacg cgatccagg cgccggaaac ctcgccgatc gggtagggcg
 1401 acaatcgggc ggcacccatcg ctgatgtgtc tgagaaaaaa gagctgtcgc
 1451 actacaacga catccgcgcac cacactagcg tcaatgcgtt caatctggaa
 1501 gtgctgcccgg caccggaaata cagctcgccg cagcgcgcgc tcagcgacgc
 1551 cgactggcat ttcatcgccg atcctgcgtc gaggttttac aacctcgct
 1601 tggctgatttggggccggc ttcttcgacc cgctgaccccg cgccgtgctg
 1651 tccacgggtt ccgggtgtcgt ggtcgtggca agtgtctcaa tcgacggcgc
 1701 acaacaggcg tcggtcgcgt tgactgggtt ggcacacaac ggttaccaag
 1751 atttggcgag ccgcgcatgc gtggtcatca atcacatcat gccgggagaa
 1801 cccaatgtcg cagttaaaga cctggtgccgg catttcgaac agcaagttca
 1851 acccgccgg gtcgtggtca tgccgtggga caggcacatt gcggccggaa
 1901 ccgagatttc actcgacttg ctcgacccta tctacaagcg caaggtcctc
 1951 gaattggcccg cagcgctatc cgacgatttc gagagggctg gacgtcggt
 2001 a

mtbn6

1 ttgagcgac ctgctgttgc tgctggtcct accgcccggg gggcaaccgc
 51 tgcgcggcct gccaccaccc ggggtgacgt cctgaccggc agacggatga
 101 ccgattttgtt actgccagcg gccgggtccga tgaaaactta tattgacgac
 151 accgtcgccgg tgctttccga ggtgttggaa gacacgcccgg ctgatgtact
 201 cggcggcttc gactttaccg cgcaaggcgt gtggcgttc gctcgcccg
 251 gatcgccgccc gctgaagctc gaccagtac tcgatgacgc cgggggtggc
 301 gacgggtcac tgctgactct ggtgtcagtc agtcgcaccc agcgctaccg
 351 accgttggtc gaggatgtca tcgacgcgtat cgccgtgtt gacgagtcac
 401 ctgagttcga ccgcacggca ttgaatcgct ttgtggggc ggcgatcccg
 451 cttttgaccg cggccgtcat cgggatggcg atgcgggcgt ggtggaaac
 501 tggcgtagc ttgtgggtggc cgttggcgat tggcatcctg gggatcgctg

FIG. 2C

551 tgctggtagg cagttcgac gcgaaacaggt tctaccagag cgcccacctg
 601 gccgagtgcc tactggtcac gacgtatctg ctgatcgcaa ccgcgcacgc
 651 gctggccgtg ccgttgcgcg gcggggtcaa ctcgttgggg gcgccacaag
 701 ttgccggcgc cgctacggcc gtgctgttt tgaccttgat gacgcggggc
 751 ggccctcgga agcgtcatga gttggcgtcg tttgccgtga tcaccgctat
 801 cgcgtcatc gcggccgccc ctgccttcgg ctatggatac caggactggg
 851 tccccgcggg gggatcgca ttccggctgt tcattgtgac gaatgcggcc
 901 aagctgaccg tcgcggtcgc gcggatcgcg ctgcccggaa ttccggtaacc
 951 cggcgaaacc gtggacaacg aggagttgtc cgatccgtc gcgaccccg
 1001 agcttaccag cgaagaaacc ccgacctggc aggccatcat cgctcggtg
 1051 cccgcgtccg cggtccggct caccgagcgc agcaaactgg ccaagcaact
 1101 tctgatcgga tacgtcacgt cgggcacccct gattctggct gccgggtcca
 1151 tcgcggtcgt ggtgcgcggg cacttcttg tacacagcct ggtggtcgcg
 1201 gtttcatca cgaccgtctg cgatttcgc tcgcggctt acgcccggcg
 1251 ctgggtgtcg tggcggttcg tggcggcgcac ggtcgcgatt ccgacgggtc
 1301 tgacggccaa actcatcatc tggtacccgc actatgcctg gctgttgtg
 1351 agcgttacc tcaacggtagc cctgggttgcg ctcgtgggtgg tcgggtcgat
 1401 ggctcacgtc cggcgcggtt caccgggtgtt aaaacgaact ctggaaattga
 1451 tcgacggcgc catgatcgct gcacatcatc ccatgctgtc gtggatcacc
 1501 ggggtgtacg acacggtccg caatatccgg ttctga

mtbn7

1 atggctgaac cggtggccgt cgatcccacc ggcttgagcg cagcggccgc
 51 gaaattggcc ggctcggtt ttccgcagcc tccggcgccg atcgcggtca
 101 gcggAACGGA ttccgggtta gcagcaatca acgagaccat gccaagcatc
 151 gaatcgctgg tcagtgcacgg gctgcccggc gtgaaaagccg ccctgactcg
 201 aacagcatcc aacatgaacg cggcggcggc cgtctatgcg aagaccgatc
 251 agtcaactggg aaccagttt agccagttatg cattcggttc gtcggcgaa
 301 ggccctggctg gcgtcgccctc ggtcggttgtt cagccaaatgc aggttaccca
 351 gctgctgagc acacccgtgt cacaggtcac gacccagctc ggcgagacgg
 401 ccgctgagct ggccacccgtt gttgttgcga cggtgccgca actcggttcag
 451 ctggctccgc acgcccgttca gatgtcgcaa aacgcatccc ccatcgctca
 501 gacgatcaatg caaacggccc aacaggccgc ccagagcgcg cagggcgca
 551 gcggcccaat gcccgcacag cttgccagcg ctgaaaaacc ggccaccggag
 601 caagcggagc cgtccacga agtgacaaac gacgatcagg gcgaccaggg
 651 cgacgtgcag ccggccgagg tcgttgcgcg ggcacgtgac gaaggcgccg
 701 ggcgttccgc gggccagcag cccggcgggg gcgttccgc gcaagccatg
 751 gataccggag ccgttgcggcc cccagcggcg agtccgctgg cggcccccgt
 801 cgatccgtcg actccggcac cctcaacaac cacaacgttg tag

FIG. 2D

mtbn8

1 atgagtatta ccaggccgac gggcagctat gccagacaga tgctggatcc
51 gggcggctgg gtggaagccg atgaagacac tttctatgac cgggcccagg
101 aatatagcca ggttttgc aaaggcaccc atgtatttgc cacctgccc
151 cagcagaaag gccacgttt cgaaggcgcc ctatggtcg gcggcgcc
201 caatgctgcc aacggcgccc tgggtgcaaa catcaatcaa ttgatgacgc
251 tgcaggatta tctcgccacg gtgattaccc ggcacaggca tattgccggg
301 ttgattgagc aagctaaatc cgatatcgcc aataatgtgg atggcgctca
351 acgggagatc gatatcctgg agaatgaccc tagcctggat gctgatgagc
401 gccataaccgc catcaattca ttggtcacgg cgacgcattt ggccaatgtc
451 agtctggtcg ccgagaccgc tgagcgggtg ctggaaatcca agaattggaa
501 acctccgaag aacgcactcg aggatttgct tcagcagaag tcgcccac
551 cccccagacgt gcctaccctg gtcgtgccat ccccgccac accgggcaca
601 ccgggaaccc cgatcaccc gggaaaccccg atcaccccg gaaccccaat
651 cacacccatc ccgggagcgc cgtaactcc gatcacacca acgcccggca
701 ctcccgtcac gccgggtgacc ccgggcaagc cggtcaccc ggtgaccccg
751 gtcaaaccgg gcacaccagg cgagccaaacc ccgatcacgc cggtcaccc
801 cccggtcgccc ccggccacac cgcaaccccg ggccacgccc gttaccccg
851 ctcccgtctcc acacccgcag ccggctccgg caccggcgc atcgccctggg
901 cccccagccgg ttacaccggc cactcccggt ccgtctggtc cagcaacacc
951 gggcacccca gggggcgagc cgccgcgcga cgtcaaacc gggcggttgg
1001 cggagcaacc tgggtgtgccc ggccagcatg cgggcggggg gacgcagtcg
1051 gggcctgccc atgcggacga atccgcgcgc tcgggtacgc cggtcgcc
1101 gtccgggtgtc ccgggcccac gggcggcggc cgccgcgcg agcggtaccc
1151 ccgtgggagc gggcgccgt tcgagcgtgg gtacggccgc ggctcgggc
1201 gcgggggtcgc atgctgccac tgggcggggc ccggtgtggta cctcgacca
1251 ggcggcggca ccgagcacgc gggcggcctc ggccgcggacg gcacccctc
1301 cccgccccgc gtcgaccgt cacatcgaca aacccgatcg cagcgagtct
1351 gcagatgacg gtacccgggt gtcgatgatc ccggtgtcgg cggtcgcc
1401 ggcacgcgcac gccgcactcg cagctgcac ggcggcccg cgtggccgc
1451 gtgatgcgcgt ggggttggcg cgacgcacgc cggcggccgt caacgcgtcc
1501 gacaacaacg cgggcgacta cgggttcttc tggatcacccg cggtgaccac
1551 cgacggttcc atcgctgtgg ccaacagcta tgggtggcc tacatacccg
1601 acgggatgga attgccgaat aagggttact tggccagcgc ggatcacgca
1651 atcccggttg acgaaattgc acgctgtgcc acctaccccg tttggccgt
1701 gcaaggctgg gcccgtttcc acgacatgac gctgcggggc gtgatcggt
1751 ccgcggagca gttggccagt tcggatcccg gtgtggccaa gattgtgctg
1801 gagccagatg acattccgga gagcggcaaa atgacggggc ggtcgccgct
1851 ggaggctgtc gaccctcgg cggcggctca gctggccgac actaccgatc
1901 agcgtttgcg cgaacttgcg ccgcggcgc cgggtggatgt caatccaccc
1951 ggcgatgagc ggcacatgtc gtggttcgag ctgatgaagc ccatgaccag
2001 caccgctacc ggcgcgagg ccgtcatct gccggcggtc cgggcctacg
2051 ctgcccactc acaggagatt gccctgcacc aagcgcacac tgcgactgac
2101 gcggccgtcc agcgtgtggc cgtcgccgac tggctgtact ggcaatacgt
2151 caccgggttg ctcgaccggg ccctggccgc cgcatgctga

FIG. 2E

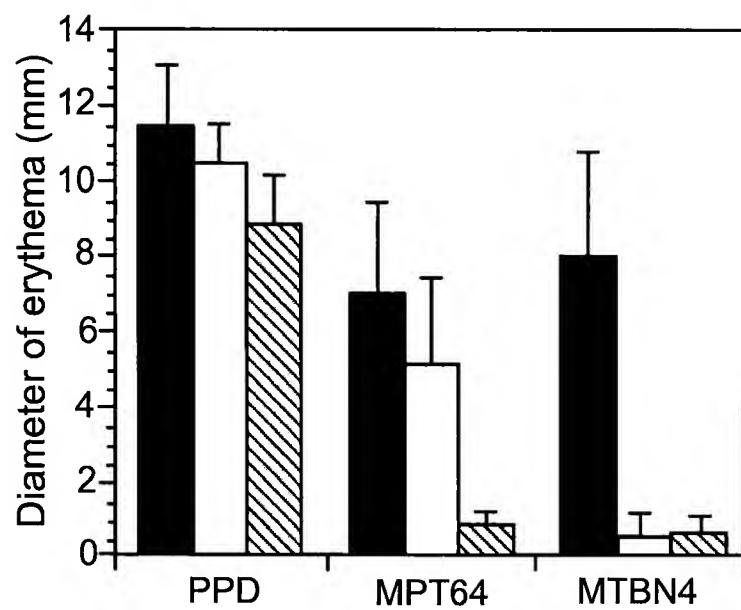


FIG. 3

FIG. 1

MTBN1

MTAEPERVTLREVVLDQLGTAESRAYKMWLPPLTNPVPLNELIARDRRQPLRFALGIMDE
PRRHLQDVGVDSGAGGNIGGGAPQTGKSTLLQTMVMSAAATHSPRNQFYCIDLGGG
GLIYLENLPHVGGVANRSEPDVKNRVVAEMQAVMRQRETTKEHRVGSIGMYRQLRDDPS
QPVASDPYGDVFLIIDGWPGFVGEGFPDLEGQVQDLAAQGLAFGVHVIISTPRWTELKSRV
RDYLGTKIEFRLGDVNETQIDRITREIPANRPGRAVSMEKHLMIGVPRFDGVHSADNLV
EAITAGVTQIASQHTEQAPPVRVLPERIHLHELDPNPPGPESDYRTRWEPIGLRETDLT
PAHCHMHTNPPLLIFGAAKSGKTTIAHAIARAIARNSPQQVRFMLADYRSGLDAVPDT
HLLGAGAINRNSASLDEAVQALAVNLKKRLPPTDLTTAQLRSRSWWSGFDVVLLVDDWHM
IVGAAGGMPPMAPLAPLLPAAADIGLHIIVTCQMSQAYKATMDKFVGAAFSGAPTMFLS
GEKQEFPSSFEFKVKRRPPGQAFLVSPDGKEVIQAPYIEPPEEVFAAPPSAG*

MTBN2

MEKMSHDPIAADIGTQVSDNALHGVTAGSTALTSVTGLVPAGADEVSAQAATAFTSEGIQ
LLASNASAQDQLHRAVEAVQDVARTYSQIDDGAAGVFAE*

MTBN3

MLWHAMPELNTARLMAGAGPAPMLAAAAGWQTLSAALDAQAVELTARLNSLGEAWTG
SDKALAAATPMVVWLQTA
STTNPIFGMPSPGSSTPVGQLPPAATQTLGQLGEMSGPMQQLTQPLQQVTSLSQVGGT
GGNPADEEEAQMGLLGTSPLSNHPLAGGSGPSAGAGLRAESLPGAGGSLTRPLMSQL
EKPVAPSVM
DWDEEDDW*

MTBN4

MAEMKTDAATLAQEAGNFERISGDLKTQIDQVESTAGSLQGQWRGAAGTAAQAAVVFQE
AANKQKQELDEISTNIRQAGVQYSRADEEQQQALSSQMGF*

MTBN5

MAADYDKLFRPHEGMEA
FVSAPP
HQPRRTAPAPPWA
GKVATGPSI
NSGRRAERRVHD
KVPKQPKATKPP
ELSHYND
FFDPLTRGV
PNVAVKDLV
ERAGRR*

FIG. 1A

FIG. 1 (continued)

MTBN6

LSAPAVAAGPTAACGATAARPATTRVTILTGRRTDLVLPAAVPMETYIDDTVAVLSEVLE
DTPADVLGGFDFTAQGVWAFARPGSPPLKLDQSLDDAGVVDGSLLTWSVSRTERYRPLV
EDVIDAIAVLDESPEFDRTALNRFVGAAIPLLTAPEVIGMAMRAWWETGRSLWWPLAIGIL
GIAVLVGSFVANRFYQSGHLAECLLVTTYLLIATAAALAVPLPRGVNSLGAQPQVAGAATA
VLFLTLMTRGGRKRHELASFAVITAIAVIAAAAAFGYGYQDWVPAGGIAFGLFIVTNAA
KLTVAVARIALPPIPVPGETVDNEELLDPVATPEATSEETPTWQAIIASVPASAVLTER
SKLAKQLLIGYVTSGTLILAAGAIAVVVRGHFFVHSLVVAGLITTVCGFRSRLYAERWCA
WALLAATVAIPTGLTAKLIIWYPHYAWLLSVYLTVALVALVVVGSMAHVRRVSPVVKRT
LELIDGAMIAAIIPMLLWITGVYDVTVRNIRF*

MTBN7

MAEPLAVDPTGLSAAAALKAGLVPQPPAPIAVSGTDSVVAINETMP SIESLVDGLPG
VKAALTRTASNMMAAADVYAKTDQLGTLSQYAFGSSGEGLAGVASVGGQPSQATQLLS
TPVSQVTTQLGETAELAPRVVATVPQLVQLAPHAVQMSQNASPIAQTI SQTAAQQAAQSA
QGGSGPMPAQLASAEEKPATEQAEPVHEVTDDQGDQGDVQPAEVVAAARDEGAGASPGQQ
PGGGVPAQAMDTGAGARPAASPLAAPVDPSTPAPSTTTL*

MTBN8

FIG. 1B

FIG. 2

mtbn1

1 atgactgctg aaccggaagt acggacgctg cgcgagggtt tgctggacca
 51 gctcggaact gctgaatcgc gtgcgtacaa gatgtggctg ccggccgttga
 101 ccaatccgggt cccgctcaac gagctcatcg cccgtgatcg gcgacaaccc
 151 ctgcgatttg ccctggggat catggatgaa cccgcggcc atctacagga
 201 tgtgtggggc gttagacgttt ccggggccgg cggcaacatc gtttattgggg
 251 gcgcaccta aaccgggaag tcgacgctac tgcagacgt ggtgatgtcg
 301 gccggcccca cacactcacc ggcgaacgtt cagttctatt gcatcgacct
 351 aggtggccgc gggctgatct atctcgaaaa cttccacac gtcgggtgggg
 401 tagccaatcg gtcccgagccc gacaaggta accgggtgt cgccagagatg
 451 caagccgtca tgcggcaacg ggaaaccacc ttcaaggaac accgagtgaaa
 501 ctcgatcggtt atgtaccggc agctgcgtga cgatccaagt caaccgggttg
 551 cgtccgatcc atacggcgac gtcttctga tcatacgacgg atggccccgt
 601 tttgtcggcg agttccccga ctttgagggg caggttcaag atctggccgc
 651 ccaggggctg gcgttcggcg tccacgtcat catctccacg ccacgctgg
 701 cagagctgaa gtcgcgtgtt cgcgactacc tcggcaccaa gatcgagttc
 751 cggcttgggtg acgtcaatga aaccaggatc gaccggatta cccgcgagat
 801 cccggcgaat cgtccgggtc gggcagtgtc gatggaaaag caccatotga
 851 tgatcggtt gcccagggtt gacggcgtgc acagcgccga taacctgg
 901 gaggcgatca ccgggggggt gacgcagatc gttccacagc acaccgaaca
 951 ggcacctccg gtgggggtcc tgccggagcg tatccacctg cacgaactcg
 1001 acccgaaacc cccgggacca gagtcgcact accgcactcg ctgggagatt
 1051 ccgatcggtt tgcgcgagac ggacotgacg ccggctcaact gcccacatgca
 1101 cacgaacccg caccatactga tcttcgggtc ggccaaatcg ggcaagacga
 1151 ccattgcccc cgcgatcgcg cgccgcattt gtggccggaaa cagtcggccag
 1201 caggtcggtt tcatacgatcg ggactaccgc tcgggcctgc tggacgcgt
 1251 gccggacacc catctgcgtt ggcggggccgc gatcaaccgc aacagcggt
 1301 cgctagacga ggcgttcaa gcaactgggg tcaacctgaa gaagcggttg
 1351 cccggaccgc acctgacgac ggcgcagcta cgctcggtt cgtgggtgg
 1401 cggatttgcac gtcgtgtttc tggtcgacga ttggcacatg atcgtgggtg
 1451 cccggggggg gatgccggcg atggcaccgc tggccgggtt attgccccgg
 1501 gcggcagata tcgggttgca catcattgtc acctgtcaga tgagccaggc
 1551 ttacaaggca accatggaca agttcgtcgg cgccgcattt gggtcgccgg
 1601 ctccgacaat gttccttgc ggcgagaagc aggaattccc atccagttag
 1651 ttcaaggta agcggcgccc ccctggccag gcatttctcg tctcgccaga
 1701 cggcaaagag gtcatccagg cccctacat cgagcctcca gaagaagtgt
 1751 tcgcagcacc cccaaagcgcc ggttaa

mtbn2

1 atggaaaaaaa tgtcacatga tccgatcgct gccgacatttgc acgcgcaagt
 51 gagcgacaac gctctgcacg ggcgtacggc cggctcgacg ggcgtacgt
 101 cgggtgaccgg gctgggttccc gggggggccgg atgaggtctc cggccaaagcg
 151 gcgcacggcggt tcacatcgga gggcatccaa ttgctggctt ccaatgcac
 201 ggcccaagac cagtcgcacc gtgcggggcgaa agcgggtccag gacgtcgccc
 251 gcacctatttgc gcaaatcgac gacggcgccg ccggcgcttt cggccaaatag

29

mtbn3

1 atgctgtggc acgcaatgcc accggagcta aataccgcac ggctgatggc
 51 cggcgccgggt ccggctccaa tgcttgcggc ggccgcggga tggcagacgc
 101 tttcgccggc tctggacgct caggccgtcg agttgaccgc ggcgtacac

FIG. 2A

~~FIG. 2~~ (continued)

151 tctctggag aagcctggac tggagggtggc agcgacaagg cgcttgccgc
201 tgaacgcgg atgggtgtct ggctacaac cgcgtcaaca caggccaaga
251 cccgtgcgtat gcaggcgacg ggcgaaagccg cggcatacac ccaggccatg
301 gccacgacgc cgtcgctgcc ggagatcgcc gccaaccaca tcacccaggc
351 cgtccttacg gccaccaact tcttcggtat caacacgatc ccgatcgctg
401 tgaccgagat ggattatttc atccgtatgt ggaaccaggc agccctggca
451 atggaggtct accaggccga gaccgggtt aacacgcttt tcgagaagct
501 cgagccgatg gcgtcgatcc ttgatcccgg cgcgagccag agcacgacga
551 acccgatctt cggaatgccc tccccctggca gctcaacacc gtttggccag
601 ttgccgcccgg cggataccca gaccctcgcc caactgggtg agatgagcgg
651 cccgatgcag cagatgaccc agccgctgca gcagggtgacg tcgttgttca
701 gccaggtggg cggcaccggc ggcggcaacc cagccgacga ggaagcccg
751 cagatggggcc tgctcgac cagtccgctg tcgaaccatc cgctggctgg
801 tggatcaggc cccagcgcgg ggcggggct gctgcgcgcg gagtcgtac
851 ctggcgcagg tgggtcggtt accccgcacgc cgctgtatgtc tcagctgatc
901 gaaaagccgg ttgccccctc ggtgatgccc gccgctgctg ccggatcgatc
951 ggcgacgggt ggcgccgc cggtggtgc gggagcgtat ggcagggtg
1001 cgaatccgg cggatccacc aggccgggtc tggtcgcgc ggcaccgc
1051 ggcgaggagc gtgaagaaga cgacgaggac gactggacg aagaggacga
1101 ctggta

mtbn4

1 atggcagaga tgaagaccga tgccgctacc ctcgcgcagg aggcaggtaa
51 tttcgagcgg atctccggcg acctgaaaac ccagatcgac caggtggagt
101 cgacggcagg ttcgttgca ggcgcgtggc gcggcgcggc ggggacggcc
151 gcccaggccg cgggtggtgcg cttccaagaa gcagccaata agcagaagca
201 ggaactcgac gagatctcga cgaatattcg tcaggccgcgt tcggatact
251 cgaggccga cgaggagcag cagcaggcgc tgcctcgca aatgggcttc
301 tga

mtbn5

1 atggcggccg actacgacaa gcttccgg ccgcacgaag gtatggaaac
51 tccggacgt atggcagcgc agccgttctt cgacccagt gcttcgtttc
101 cgccggcgcc cgcacccgc aacctaccga agcccaacgg ccagactccg
151 cccccgacgt cgcacgcac gtcggagcgg ttcgtgtcg ccccgccgc
201 gccaccccca cccccaccc cgcctccgc aactccgatc ccgatcgccg
251 caggagagcc gccctcgccg gaaccggccg catctaaacc acccacacacc
301 cccatgcccc tgcgggacc cgaaccggcc ccacccaaac cacccacacc
351 cccatgcccc atgcgggac cggAACGGC cccacccaaa ccacccacac
401 ctccgatgccc catcgccggc cctgcacccca ccccaacccga atcccagt
451 ggcggccccc gaccaccgc accacaaacg ccaaccggag cgccgcagca
501 accggaatca cggcgcccc acgtaccctc gcacgggcca catcaacccc
551 ggcgcaccgc accaccccg ccctggcaa agatgccaat cggcgaacccc
601 cccggccctc cgtccagacc gtctgcgtcc ccggccgaac caccgaccgg
651 gcctgccccca caacactccc gacgtgcgcg ccggggtcac cgctatcgca
701 cagacaccga acgaaacgtc gggaaaggtag caactggtcc atccatccag
751 ggcggctgc gggcagagga agcatccggc ggcgcagctg ccccgaaac
801 ggagccctcg ccagcgccgt tggcccaacc gagatcgatc ctggctccgc
851 ccacccgccc cgcgcggaca gaaccctcccc ccagccctc gccgcagcgc
901 aactccggtc ggcgtgcga ggcgcagcgtc caccggatt tagccgcccc

FIG 2B

FIG. 2 (continued)

951 acatgccgac ggcgaacctg attcaattac ggccgcaacc actggcggtc
1001 gtcccgca a cgtgcagcg ccggatctcg acgcgacaca gaaatccta
1051 aggccggcgg ccaaggggcc gaaggtgaag aaggtgaagc cccagaaacc
1101 gaaggccacg aagccgccc aagtgggtgc gcagcgccg tggcgacatt
1151 gggtgcatgc gttgacgcga atcaacctgg gcctgtcacc cgacgagaag
1201 tacgagctgg acctgcacgc tcgagtcgc cgcaatcccc gcgggtcgta
1251 tcagatcgcc gtcgtcggtc tcaaagggtgg ggctggcaaa accacgtga
1301 cagcagcggtt ggggtcgacg ttggctcagg tgccggccga ccggatcctg
1351 gctctagacg cggatccagg cgccggaaac ctgcgcgatc gggtagggcg
1401 acaatcgggc ggcgaccatcg ctgatgtgct tgcagaaaaa gagctgtcgc
1451 actacaacga catccgcgc cacactagcg tcaatgcgtt caatctggaa
1501 gtgctgcccgg caccggaaa cagctcgccg cagcgccgc tcagcgacgc
1551 cgactggcat ttcatcgccg atcctgcgtc gaggtttac aacctcgct
1601 tggctgattt tggggccggc ttcttcgacc cgctgaccgg cggcgtgt
1651 tccacgggtt ccggtgtcggt ggtcgtggca agtgtotcaa tcgacggcgc
1701 acaacaggcg tcggtcgcgt tggactggtt ggcgcaacaac gtttaccaag
1751 atttggcgag ccgcgcatgc gtggcatca atcacatcat gccgggagaa
1801 cccaatgtcg cagttaaaga cctggtgccgg catttgcac agcaagttca
1851 acccgccgg gtcgtgtca tgccgtggga caggcacatt gcggccggaa
1901 ccgagattt actcgacttg ctgcaccata tctacaagcg caaggtcctc
1951 gaattggccg cagcgctatc cgacgatttc gagagggctg gacgtcggt
2001 a

mtbn6

1 ttgagcgcac ctgctgttgc tgctggtcct accggccggg gggcaaccgc
51 tgcgcggcct gccaccaccc ggggtgacgat cctgaccggc agacggatga
101 ccgatttggt actgccagcg ggggtgcccga tggaaactta tattgacgac
151 accgtcgccg tgctttccga ggtgttggaa gacacgcccgg ctgatgtact
201 cggcggtttc gactttaccg cgcaaggcgt gtggcggtt gctcgcccc
251 gatcgccgccc gctgaagctc gaccagtac tcgatgacgc cgggggtggc
301 gacgggtcac tgctgactct ggtgtcagtc agtgcacccg agcgctaccc
351 accgttggtc gaggatgtca tcgacgcgtat cgccgtgctt gacgagtcac
401 ctgagttcga ccgcacggca ttgaatcgct ttgtggggc ggcgatcccg
451 ctttgaccg cgcccgcatc cgggatggcg atgcgggcgt ggtggaaac
501 tggcgtagc ttgtgggtggc cggtggcgat tggcatcctg gggatcgctg
551 tgctggtagg cagcttcgtc gcgaaacaggt tctaccagag cggccacact
601 gccgagtgcc tactggtcac gacgtatctg ctgatcgcaa ccgcccgcagc
651 gctggccgtg ccgttgcgcg ggggggtcaat ctgcgtgggg ggcgcacaag
701 ttgcccggcgc cgctacggcc gtgcgtttt tgaccttgat gacgccccgg
751 ggcctcgga agcgcatga gttggcgctg tttgcgtga tcaccgctat
801 cgcggtcattc gcccggccg ctgccttcgg ctatggatac caggactgg
851 tccccgggg ggggatcgca ttggggctgt tcattgtgac gaatcgcc
901 aagctgaccg tcgcggtcgc gcgatcgcg ctgcgcgcg ttccggatt
951 cggcgaaacc gtggacaacg aggagttgtc cgatccgcgt gcgcacccgg
1001 aggctaccag cgaagaaacc cgcacccgtgc aggccatcat cggtcggt
1051 ccccggtccg cgggtccggct caccgagcg c gcaaaactgg ccaagcaact
1101 tctgatcgga tacgtcacgt cgggcacccct gattctggct gccggcgcca
1151 tcgcggtcgt ggtgcgggg cacttcttg tacacagcct ggtggtcgc
1201 ggtttgatca cgaccgtctg cggatttcgc tcgcggctt acgcccggcg
1251 ctgggtgcg tggcggttgc tggcgccgac ggtcgccatt ccgacgggtc
1301 tgacggccaa actcatcatc tggtaaccgc actatgcctg gctgttgg

FIG. 2C

FIG. 2 (continued)

1351 agcgtctacc tcacggtagc cctgggtgcg ctcgtggtgg tcgggtcgat
1401 ggctcacgtc cggcgcggtt caccgggtcgaaaacgaact ctggaattga
1451 tcgacggcgc catgatcgct gccatcattc ccatgctgct gtggatcacc
1501 ggggtgtacg acacggtccg caatatccgg ttctga

mtbn7

1 atggctgaac cggtggccgt cgatcccacc ggcttgagcg cagcggccgc
51 gaaattggcc ggctcggtt ttccgcagcc tccggcccg atcgccgtca
101 gcggAACGGA ttccgggtta gcagcaatca acgagaccat gccaagcata
151 gaatcgctgg tcagtgcacgg gctgccccggc gtgaaagccg ccctgactcg
201 aacagcatcc aacatgaacg cggcgccgga cgtctatgcg aagaccgatc
251 agtcactggg aaccaggttt agccagttatg cattcggttc gtcggcgaa
301 ggccctggctg gcgtgcgcctc ggtcggttgt cagccaagtc aggctaccca
351 gctgctgagc acaccctgtt cacaggtcac gacccagctc ggcgagacgg
401 ccgctgagct ggcacccctgtt gttgtgcga cggtgccgca actcggttcag
451 ctggctccgc acggcgttca gatgtcgcaa aacgcataccc ccatacgctca
501 gacgatcagt caaacggccc aacaggccgc ccagagcgcg cagggcggca
551 gcggcccaat gcccgcacag cttgccagcg ctgaaaaacc gcgcaccagg
601 caagcgagc cggtccacga agtgcacaac gacgatcagg ggcgaccagg
651 cgacgtgcag cggcccgagg tcgttgcgc ggcacgtgac gaaggcgccg
701 ggcgcattcacc gggccagcag cccggcgggg gcgttcccgc gcaagccatg
751 gataccggag cccggtgcggc cccagcgccg agtccgctgg cggccccgt
801 cgatccgtcg actccggcac cctcaacaac cacaacgtt tag

mtbn8

1 atgagtatta ccaggccgac gggcagctat gccagacaga tgctggatcc
51 gggcggctgg gtggaaagccg atgaagacac tttctatgac cgggcccagg
101 aatatacgcca gttttgc当地 agggtcacccg atgtatttggc cacatcgccgc
151 cagcagaaag gccacgttcc cgaaggccgc ctatggtccg gggcgccgc
201 caatgctgcc aacggcgccc tgggtgc当地 catcaatcaa ttgatgacgc
251 tgcaggatta tctcgccacg gtgattaccc ggcacaggca tattgccgg
301 ttgattgagc aagctaaatc cgatatcgcc aataatgtgg atggcgctca
351 acgggagatc gatatcctgg agaatgaccc tagcctggat gctgatgagc
401 gccataccgc catcaattca ttggtcacgg cgacgcattt ggcacatgtc
451 agtctggctcg ccgagaccgc tgagcgggtg ctggatcca agaattggaa
501 acctccgaag aacgcactcg aggatttgc tcagcagaag tcgcccgcac
551 ccccagacgt gcctaccctg gtcgtccat ccccgccac accgggcaca
601 cccggaaaccc cgatcaccctt gggaaaccccg atcaccctgg gaaccccaat
651 cacacccatc cccggagcgc cggtaactcc gatcacacca acgcccggca
701 ctcccggtcac gccgggtgacc cccggcaagc cggtaaccctt ggtgaccccg
751 gtcaaaaccgg gcacaccagg cgagccaaacc cggatcaccgc cggtaaccctt
801 cccggctgccc cccggccacac cggcaaccccg ggcacgcggc gttaccccg
851 ctcccggtcc acaccggcag cccggctccgg caccggcgcc atcgccctgg
901 ccccagccgg ttacaccggc cactcccgat cccgtctggc cagcaacacc
951 gggcaccctt gggggcgagc cggcgccgc cgtcaaaaccgc gggcggttgg
1001 cggagcaacc tgggtgcgc gggcagcatg cgggcggggg gacgcagtcg
1051 gggcctgccc atgcggacga atccggccgc tcgggtgacgc cggctgcggc
1101 gtccgggtgtc cccggcgccac gggcggcgcc cggccgcggc agcggtaaccg
1151 cccgtggagc gggcgccgcgt tcgagcgtgg gtacggccgc ggcctcgccg
1201 cccgggtgcgc atgcgtccac tggggcgccgc cccggctggcta cctcgacaa

FIG. 2D

FIG. 2 (continued)

1251 ggcggcggca ccgagcacgc gggcgccctc ggccggacg gcacctcctg
1301 cccgcccggcc gtcgaccgat cacatcgaca aacccgatcg cagcgagtct
1351 gcagatgacg gtacgccggt gtcgatgatc cccgtgtcgg cggctcgccc
1401 ggcacgcgac gccgcactg cagctgccag cgccccccag cgtggcccg
1451 gtgatgcgcgt gcggttggcg cgacgcacgt cgccggcgct caacgcgtcc
1501 gacaacaacg cggggacta cgggttcttc tggatcaccg cggtgaccac
1551 cgacggttcc atcgctgtgg ccaacagcta tgggctggcc tacatacccg
1601 acgggatgga attgccgaat aagggtgtact tggccagcgc ggatcacgca
1651 atcccggttgc acgaaattgc acgctgtgcc acctaccggg ttttggccgt
1701 gcaaggcctgg gcggcttcc acgacatgac gctgcggcg gtgatcggt
1751 cccggagca gttggccagt tcggatcccg gtgtggccaa gatttgtctg
1801 gagccagatg acattccgga gagcggcaaa atgacgggccc ggtcgccgct
1851 ggaggtcgta gacccctcggt cggcggctca gctggccgac actaccgatc
1901 agcggttgcgacttgcgttgc cccggcgcc cgggtggatgt caatccaccg
1951 ggcgatgagc ggcacatgct gtggttcgag ctgatgaagc ccatgaccag
2001 caccgctacc ggccgcgagg ccgctcatct gcggggcttc cgggcctacg
2051 ctgcccactc acaggagatt gccctgcacc aagcgcacac tgccactgac
2101 gcggccgtcc agcgtgtggc cgtcgccgac tggctgtact ggcaatacgt
2151 caccgggttgc ctcgaccggg ccctggccgc cgcatgctga

FIG. 2E

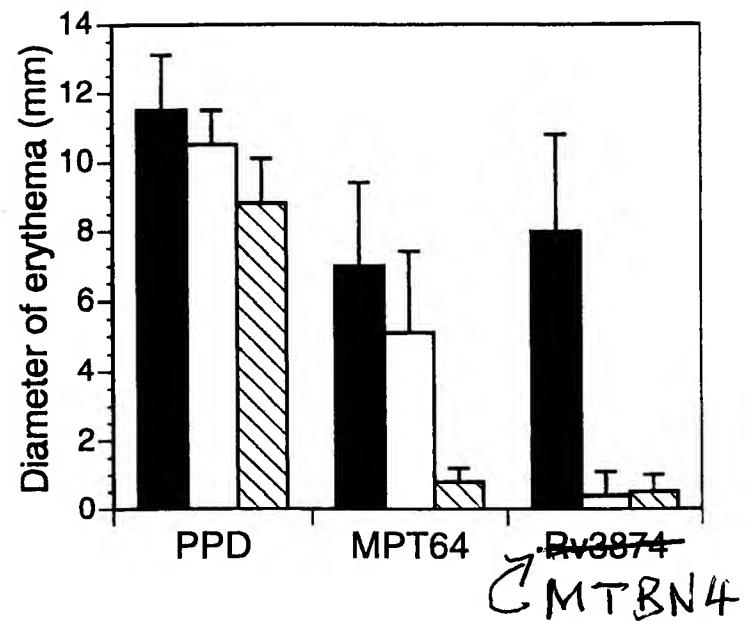


FIG 3